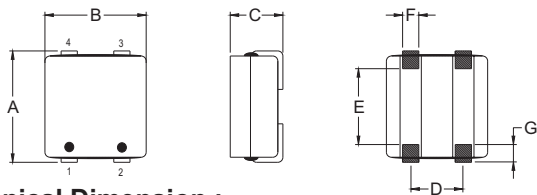
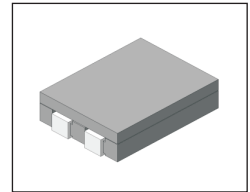


# SMT Couple Inductor

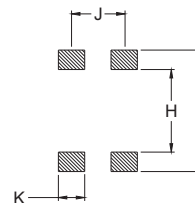
## DHCB Type

### Features

- RoHS compliant.
- Low profile, SMD type.
- High current.
- Magnetic shielded.
- High energy storage and low DCR.
- Provided with embossed carrier tape packing.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.



RECOMMENDED PAD PATTERNS



### Mechanical Dimension :

UNIT : mm

SERIES	A	B	C (MAX)	D±0.5	E±1.0	F±0.2	G±0.5	H	I	J	K
DHCB0620B	7.0 ± 0.5	6.0 ± 0.5	2.0	2.5	4.0	1.5	1.5	3.0	8.00	2.5	2.0
DHCB0630B	7.0 ± 0.5	6.0 ± 0.5	3.0	2.5	4.0	1.5	1.5	3.0	8.00	2.5	2.0
DHCB1040B	10.5 ± 1.0	10.0 ± 0.5	4.0	4.1	6.0	2.0	2.5	5.0	12.00	4.1	2.5
DHCB1350B	12.7 MAX.	12.05 MAX.	5.0	5.3	9.3	3.0	1.5	8.8	13.20	5.3	3.8
DHCB1375B	13.0 ± 0.5	13.0 ± 0.5	7.8	4.1	8.0	2.0	2.5	7.5	14.00	4.1	2.5
DHCB1440B	14.0 MAX.	10.0 ± 0.5	4.0	4.1	8.0	2.0	2.5	8.4	14.60	4.1	2.5
DHCB1480B	13.0 ± 1.0	12.0 ± 0.5	8.0	6.3	8.0	4.3	2.5	7.5	14.00	6.3	4.8
DHCB1490B	14.5 ± 1.0	16.0 ± 0.5	9.0	6.1	9.5	2.0	2.5	9.0	15.50	6.1	2.5
DHCB1740B	17.0 ± 1.0	10.0 ± 0.5	4.0	4.2	13.0	2.4	2.0	11.4	19.05	4.2	3.6
DHCB1970B	19.7 ± 1.0	13.5 ± 0.5	7.0	5.3	13.5	2.2	3.0	12.5	20.70	5.3	2.7

### Electrical Characteristics : At 25°C: 100KHz, 1V

PART NO.	L <sup>1</sup> (nH)	L @ Isat1 (nH)	2*Lk <sup>2</sup> (nH)	2*Lk @ Isat2 (nH)	DCR (mΩ)	Isat1 <sup>3</sup> (Adc)	Isat2 <sup>4</sup> (Adc)
DHCB0620B-800	80 ± 20%	64 ± 20%	40 ± 20%	32 MIN.	0.53 ± 10%	15	50
DHCB0620B-101	100 ± 20%	80 ± 20%	50 ± 20%	40 MIN.	0.53 ± 10%	12	40
DHCB0620B-141	140 ± 20%	112 ± 20%	70 ± 20%	56 MIN.	0.53 ± 10%	8	30
DHCB0630B-151	150 ± 20%	120 ± 20%	75 ± 20%	80 MIN.	0.53 ± 10%	15	30
DHCB1040B-R15	150 ± 20%	120 MIN.	150 ± 20%	/	0.30 ± 10%	38	/
DHCB1040B-R30	300 ± 20%	224 ± 20%	150 ± 20%	180 ± 20%	0.30 ± 10%	21	40
DHCB1350B-R20	200 ± 20%	160 MIN.	120 ± 20%	96 MIN.	0.265 MAX.	24	50
DHCB1375B-OR3	300 ± 20%	240 MIN.	200 ± 20%	/	0.43 ± 10%	55	/
DHCB1440B-OR3	300 ± 20%	240 MIN.	180 ± 20%	144 MIN.	0.49 ± 10%	26	60
DHCB1440B-R36	360 ± 20%	300 MIN.	200 ± 20%	160 MIN.	0.49 ± 20%	20	55
DHCB1480BW-OR3	300 ± 20%	240 MIN.	200 ± 20%	/	0.18 ± 20%	50	/
DHCB1490B-R42	420 ± 20%	336 MIN.	280 ± 20%	/	0.53 ± 20%	55	/
DHCB1740B-R31	310 ± 20%	300 MIN.	168 ± 20%	168 ± 20%	0.38 ± 10%	21	35
DHCB1970B-R42	420 ± 20%	336 MIN.	280 ± 20%	/	0.45 ± 10%	55	/

1. L is the inductance of each phase (1-4 @ 2,3 open or 2-3 @ 1,4 open) @100KHz, 1V, 25°C.
2. 2\*Lk is two times of leakage inductance (1-2 @ 4,3 short)
3. Isat1 is the DC current which cause the L drop to L @ Isat1.(The unbalance current of both phase should smaller than Isat1.)
4. Isat2 is the DC current which cause the 2\*Lk drop to 2\*Lk @ Isat2.
5. Operating temperature : -40°C to 125°C ( including self-temperature rise ).



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